

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

September 7, 2012

Via E-mail
John A. Moore
Chief Executive Officer
Acorn Energy, Inc.
4 West Rockland Road
Montchanin, DE 19710

Re: Acorn Energy, Inc.

Form 10-K for the Year Ended December 31, 2011

Filed March 15, 2012

Response Letter submitted August 30, 2012

File No. 1-33886

Dear Mr. Moore:

We have reviewed your response and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to this comment, we may have additional comments.

Form 10-K for the Year Ended December 31, 2011

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>, page 32

Results of Operations, page 41

1. We note your response to comment two from our letter dated August 6, 2012. Your discussion did not address changes in segment net income (loss) before income taxes which also had significant fluctuations between periods. Please revise your future filings accordingly and show us supplementally what your revised disclosure will look like for 2011 as compared to 2010.

John A. Moore Acorn Energy, Inc. September 7, 2012 Page 2

You may contact Lisa Etheredge, Staff Accountant, at (202) 551-3424 or the undersigned at (202) 551-3769 if you have questions.

Sincerely,

/s/ Rufus Decker

Rufus Decker Accounting Branch Chief